

ABSTRACT

The present invention is intended to raise the data density during the process which comprises irradiating a thin film of a polymer compound containing an azobenzene structure with light to form an unevenness pattern on the surface thereof, whereby data are recorded. When a thin azobenzene polymer film is irradiated with a linearly polarized circular laser beam or an ellipsoidal (or rectangular) laser beam having a band of light and darkness, a surface relief pattern characterized by portions by a number of k and raised portions by a number of $(k + 1)$ arranged alternately in a straight line is obtained. By making the use of the anisotropy of this pattern, a new data recording/reproducing method can be realized.